NATIONAL FORM NO. 10
5010-10

UNITED STATES GOVERNMENT

Memorandum

TO : Executive Assistant, OC

SCD-M70-716

DATE: 11 DEC 1970

FROM : Chief, Staff Communications Division, OC

SUBJECT: Increased OC Use of ADP Processes

REF : OC-M-70-703, dated 5 November 1970

1. The items pertinent to the reference will be treated with respect to what OC-SCD is presently doing and what is felt may be done in the future.

2. At present, the following items are used in Agency ADP devices to allow for efficient operation.

    a. Equipment Failure Reports. OC-SCD is charged with maintaining at least 1400 individual line items. Some of these equipments are complex. In order that better maintenance on this equipment may be effected, a program has been developed to determine what items fail most often. The cause of failures are reported and the total number pertinent to a specific item is maintained. The component failure statistics can then be used to predict expected failure rates and preventive maintenance effected. This program is still in the development phase; however, in the future, a more efficient program will become evident.

    b. Communications Equipment Program Activity (BYCEPA). The 1400 plus line items in use in the staff communications system have an expected useful life. To effect a system that is not obsolete, a plan has been devised to replace equipment on a periodic basis. BYCEPA is a proposed plan for the future replacement of staff equipment on a world-wide basis in a timely fashion.

    c. Antenna Design. OC-SCD is presently using computer programs to match antenna characteristics to propagation paths for specific staff communications requirements. These programs provide an efficient method of determining the best propagation paths of transmitting antennas to cover specific geographic areas.

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d. Cable Traffic Analysis (CATRAN). CATRAN provides the mechanism for reporting [   ] statistics on a world-wide basis. It provides a management tool for determining staffing and equipping of each Agency facility and reflects the amount of work done for other agencies.

3. The following items are included to indicate those areas where possible automation would be cost effective.

a. Repair/Return System. A service to the field is being offered in the development of the printed circuit board repair/return system. It is not cost effective to maintain a stock level of all PC boards required to maintain all equipments at every field station. Therefore, a repair/return facility concept is being developed. A pilot project to refine and clarify the type of information needed to make the system cost effective was initiated.

The SG-75A (Sideband Exciter) is an item of such importance in the system that this was selected as the pilot project item. A manual tabulation is maintained on the failures of PC boards associated with this equipment. As the failures are reported by cable, a replacement board is immediately sent to the field. When the defective board is repaired, it is placed in stock for future issue. The failure rates are then plotted to determine trends; and, where possible, modifications are made to mitigate the situation.

The present manual tabulation is satisfactory to cover the single item. However, as the system concept is refined, more equipments will be placed in the repair/return system. At that time, it may be cost effective to computerize the repair/return system.

b. Automation of Document Updating. OC-SCD generates voluminous specification documents for the purchase of large, complex systems. Procedural documents listing guidelines for communications circuits are also large volumes which must be updated periodically. At present, when a change is made to these documents, it is necessary to retype the complete page on which the correction is required. Many amendments must be made during the life of the documents. Many hours are consumed in simply retyping. If the original document could be stored and corrections could be made "on line" within the computer, corrected pages could be expanded to include Maintenance Parts Lists (MPL's), Mandatory Work Orders (MWO's), etc.

4. At present, there are no automated reports which could be better produced manually.

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